

COST ASSUMPTIONS/INFORMATION

For pricing purposes, the following assumptions for the identified WBS elements shall be used:

C.6.1 Main Plant Process Building Demolition and Removal

Following are assumptions to be utilized by Offerors for the starting conditions of the Main Plant Process Building:

MPPB Beginning Condition Summary Synopsis

Area	Window ¹	liner	Remaining Equipment ^{11,12}	Piping ⁴	Floor ⁶	Walls ⁶	Ceiling ⁶	Asbestos ⁷	RCRA Hazardous	Radiological
Process Mechanical Cell (PMC)	yes (6)	yes	manipulators, in-cell lighting, cameras, PaR Bridge with hoist, Nitrocision maintenance table, work table intrinsic to PMC floor and transfer shutter shield, Operable	as found	Prior to decon vacuum visible debris accumulation, decon using 1 pass nitrocision® with additional pass for hot spots- not fixed	Decontaminated to accessible wall surfaces up to limitation of remote tooling ~16 ft. from floor - not fixed	as found	none	see notes 9 and 10	HCA, VHRA, Air
General Purpose Cell (GPC)	yes (3)	yes	Cameras, PaR bridge with hoist, small maintenance table, racks behind shield wall, manipulators, and in-cell lighting, Operable	as found	Prior to decon vacuum visible debris accumulation, decon using 1 pass nitrocision® with additional pass for hot spots- not fixed	Decontaminated to accessible wall surfaces up to limitation of remote tooling ~13 ft. from floor - not fixed	as found	none	see notes 9 and 10	HCA, VHRA, Air
Off-Gas Cell (OGC)	no	yes (pan)	none	none	5.5 inches of grout on liner, fixed	NW wall scabbling, fixed	fixed	none	see note 9	HCA, HRA, Air
Extraction Cell 1 (XC-1)	no	yes (pan)	XC-1 arm assembly, cameras, water transfer equipment, Operable	none	fixed, no grout	fixed	fixed	none	see note 9	HCA, HRA, Air Fissile
Remainder of Main Plant⁸										
Extraction Cell Areas										
XC-2	no	yes (pan)	water transfer equipment, Operable	none	as found, fixative applied	as found, fixative applied	as found, fixative applied	none	see note 9	HCA, HRA, Air
XC-3	no	yes (pan)	water transfer equipment, Operable	none	fixed, no grout	fixed	fixed	none	see note 9	HCA, HRA, Air

Area	Window ¹	liner	Remaining Equipment ^{11,12}	Piping ⁴	Floor ⁶	Walls ⁶	Ceiling ⁶	Asbestos ⁷	RCRA Hazardous	Radiological
PPC- N	no	yes (pan)	roller system Operable see note 5	none	fixed	fixed	fixed	none	see note 9	HA, RA
PPC- S	no	yes (pan)	mast climber Operable see note 5	none	fixed, no grout	fixed	fixed	none	see note 9	HA, RA
CAA	no	no	see note 5	as is	fixed by as-is paint	fixed by as-is paint	fixed by as-is paint	none	see notes 9 and 10	Some CA, HCA
South Stairwell	no	no	none	as found (no process piping)	fixed	fixed	fixed	none	see notes 9 and 10	Most areas not Posted (may be RBA, RMA, FCA) S Stairs: RA, Ca at bottom, shielding on wall in OGC/ARPR area, hot spots
ULO	no	no	pumps, valves, piping that support remaining UPC vessels Tank 5V-1, Operable	as is	as found Fixed, no grout	as found Fixed	as found Fixed	~25 LF on residual piping	see notes 9 and 10	CA
UPC	no	yes (pan)	2 components: 5D-15A and 5D-15B and supporting hardware, Operable	as found	as found Fixed, no grout	as found Fixed	as found Fixed	none	see notes 9 and 10	HCA, HFA, HRA, Air
PPH	no	no	doors, roller sys., Operable see note 5	as found	Fixed by as is paint	Fixed by as is paint	Fixed by as is paint	none	see notes 9 and 10, hydraulic oil contamination below compactor	CA
PPS-Air Lock	no	no	hoist, Hg abatement tank, and associated equip (power disconnected)	as is	fixed by as-is paint	fixed by as-is paint	fixed by as-is paint	none	see notes 9 and 10	CA
XCR	no	no	cranes and associated hardware, Operable	as found	fixed by as-is paint	fixed by as-is paint	fixed by as-is paint	~200 LF	see notes 9 and 10	Some CA XCRE: CA,
PEA	no	no	TVS inoperable	as found	fixed by as-is	fixed by as-is paint	fixed by	see XCR	see notes 9	Some CA,

Area	Window ¹	liner	Remaining Equipment ^{11,12}	Piping ⁴	Floor ⁶	Walls ⁶	Ceiling ⁶	Asbestos ⁷	RCRA Hazardous and 10	Radiological
					paint		as-is paint			
Acid Recovery SW Corner										
ARPR	no	no, 6" grout on floor in 2001	none	none	fixed	fixed	fixed	none	see note 9, potential metals under 2001 grout	HCA, HFA, HRA, Air
OGBR	yes (1)	1 pan lined pump niche	niche covers	none	filter recesses and pump niche surfaces fixed	fixed	fixed	none	see note 9, Pb in niche covers	HCA, HFA, HRA, Air
ARC	no	no, 6" grout on floor in 1967, 3" on floor in 2008	none	none	fixed	fixed	fixed	none	see note 9, potential metals under 1967 grout	HCA, HFA, HRA, Air
HAC	no	no	Supplemental ventilation (installed 2010) operational	none	fixed	fixed	fixed	none	see note 9, possible metals contamination on floor	HCA, HFA, HRA, Air
PCR	no	no	as is, 95% removed	as is 95% removed	fixed by as is paint	fixed by as is paint	fixed by as is paint	none	see notes 9 and 10	CA,
OGA	no	no	None, See note 5	as is 90% removed	fixed by as is paint	fixed by as is paint	fixed by as is paint	none	see notes 9 and 10, Pb shielding on N wall; potential metals contamination of NW corner	CA, RBA
West Stairwell	no	no	none	as found	fixed by as is paint	fixed by as is paint	fixed by as is paint	none	see notes 9 and 10	FCA

Area	Window ¹	liner	Remaining Equipment ^{11,12}	Piping ⁴	Floor ⁶	Walls ⁶	Ceiling ⁶	Asbestos ⁷	RCRA Hazardous	Radiological
East Stairwell	no	no	none	as found	fixed by as is paint	fixed by as is paint	fixed by as is paint	none	see notes 9 and 10	FCA
Shielded Lab Cells										
ADA	no	no	none	as found	as found, fixed	as found, fixed	as found, fixed	none	see notes 9 and 10	CA, RA,
Hot Cells 1-5	yes (5)	yes (5) full liner in-place	Manipulators, HC 1-3 operable, 4-5 operational, doors, and misc. equip	as found	as found	as found,	as found	none	see notes 9 and 10	HCA, HRA, Air
2CSC	yes (1)	full liner in-place	manipulators doors, and misc. equip	as found	as found	as found	as found	none	see notes 9 and 10	HCA, HRA, Air
SSC	yes (3)	yes (pan)	misc. Lab/ sample transfer equip., operational	as found	as found	as found	as found	none	see notes 9 and 10	HCA, HRA, Air
ANA	no	no	Rad Lab support equip remains operational	as found	as found	as found	as found	~ 750 LF ACM piping; ~ 5900 SF plaster and flooring	see notes 9 and 10	Some CA, RMA
Analytical Labs	no	no	Misc. radiological support, office, and lab equip.	as found	as found	as found	as found	~470 LF on residual piping, SF included in ANA numbers	see notes 9 and 10	CA, RA
XSA	no	no	storage equip	as found	as found	as found	as found	none	see notes 9 and 10	RBA, HFA behind plates
Head End Cell Areas										

Area	Window ¹	liner	Remaining Equipment ^{11,12}	Piping ⁴	Floor ⁶	Walls ⁶	Ceiling ⁶	Asbestos ⁷	RCRA Hazardous	Radiological
PMCR	yes (1)	no	PMC bridge crane (operable), support and other equipment	as found, 900 lf utility piping	fixed	fixed	fixed	none	see notes 9 and 10	HCA, HRA, Air
PMC Door Hoist	no	no	Door hoist operable	as found	as found	as found	as found	none	see notes 9 and 10	CA, RA
PMCR Extension	yes (2)	no	Crane w/ 2 hoists, rolling hatch, lighting, HEPA filter, operable	as found	fixed	fixed	fixed	none	see notes 9 and 10	CA
PMC-TA	no	no	transfer trolley and rails; drive unit drained	as found	fixed	fixed	fixed	none	see notes 9 and 10	HRA, CA
MRR	yes (1) Plexiglas	no	ladder, see note 5	as found	fixed	fixed	fixed	none	see notes 9 and 10	HCA, RA, Air
RER	no	no	see note 5	as found	fixed	fixed	fixed	none	see notes 9 and 10	Some CA, RBA
E-MOA	no	no	Shear housing (inoperable), nitroclision unit and associated equipment opeable. MCC #8 (operational), and PMC-TA	as found	as found	as found	as found	~150 LF	see notes 9 and 10	Some CA
W-MOA	no	no	PAR controller, hatch controls, SRR operating equip (operable), 2 CPC valve pits and associated equip.(inoperable)	as found	as found	as found	as found	none	see notes 9 and 10	Some CA, Condensate pits: CA
N-MOA	no	no	hydraulic unit, operable	as found	as found	as found	as found	see EMOA	see notes 9 and 10	Some CA, RA by MRR Wall
MC	yes (1)	yes	Crane drained, camera insert, and shielding shutter	none	Fixed	fixed	fixed	none	see note 9	HCA, HRA, Air
GCR	no	no	crane operable, shield door and equip, operable	as found (~600 lf)	fixed	fixed	as found	none	see notes 9 and 10	HCA, HRA, Air

Area	Window ¹	liner	Remaining Equipment ^{11,12}	Piping ⁴	Floor ⁶	Walls ⁶	Ceiling ⁶	Asbestos ⁷	RCRA Hazardous	Radiological
GCRX	no	no	GPC bridge crane operable and other equipment	as found (~450 lf)	fixed	fixed	removable hatches as found	none	see notes 9 and 10	HCA, RA, Air
35104 Vault	no	no (tank used as concrete vault form)	35104 tank (drained and operable) heal remains	drained and as found, (~300 lf)	as found (inaccessible)	as found (inaccessible)	removable hatches, as found (inaccessible)	none	see notes 9 and 10	HCA, HRA, Air
GOA	no	no	pipng chase support racks, see note 5	as is	fixed by as-is paint	fixed by as-is paint	fixed by as-is paint	none	see notes 9 and 10	Some CA Fixed rad on F and N wall. Historically - Gamma rad field at E end from inadequately shielded vent duct
GCR Enclosure	yes (2)	no	crane/hoist and associated equip, rollup door, hatch covers, operable	as found	Fixed	Fixed	Fixed	none	see notes 9 and 10	CA
SRR	yes (1)	no	roller conveyor, crane, MSM rollup door, and drum assayer, operational	as found	Fixed	Fixed	Fixed	none	see notes 9 and 10	CA, Air
N. Stairwell	no	no	none	as found	fixed by as-is paint	fixed by as-is paint	fixed by as-is paint	none	see notes 9 and 10	Most areas not Posted (may be RBA, RMA, FCA) N. Stairs: Some CA
Upper + Lower Niches/aisles										
LWA	no	no	2T hoist, (operable) and misc. racks. See note 5	as is (~950 lf)	fixed	fixed	fixed	none	see notes 9 and 10	Some CA, RA,
LWA niches	no	9 niches floor and wall	None	none	fixed	fixed	shield covers, fixed	none	see notes 9 and 10 Pb wool from	HCA, HFA, RA, Air

Area	Window ¹	liner	Remaining Equipment ^{11,12}	Piping ⁴	Floor ⁶	Walls ⁶	Ceiling ⁶	Asbestos ⁷	RCRA Hazardous	Radiological
		liners							valve access port removed	
UWA	no	no	Hoist (operable), miscellaneous racks	as found, e.g. cooling water header and pipe chase	fixed by as is paint	fixed by as is paint	fixed by as is paint	none	see notes 9 and 10	Some CA, RA
UWA niches	no	6 niches floor and wall liners	none	none	fixed	fixed	shield covers, fixed	none	note 9	HCA, HFA, RA, Air
LXA	no	no	instrumentation racks, condensate pump, 2 chemical addition tanks, associated piping valving	as found	fixed by as-is paint	fixed by as-is paint	fixed by as-is paint	none	see notes 9 and 10	Some CA, some RA (HRA w/I 3' of 36" VEC duct)
Fuel Receiving & Storage										
FSP	no	no	100T crane, bridge crane and controls, exterior liquid solidification controls trailer, operable	as found	6" grout added in 2002-3	as found	n/a	n/a	see notes 9 and 10	CA, RA
CUP	no	yes	none	none	6" grout added in 2002-3, as found	fixed	n/a	n/a	see notes 9 and 10	CA, RA
WTA	no	yes (pan), no grout	none	none	As found	fixed	n/a	n/a	see notes 9 and 10	HCA, HRA
N & S Concrete walkways Rail area apron	no	no	MCC, rollup doors and controls – operable see note 5	as found	fixed by as-is paint	n/a	n/a	~650 lf.	see notes 9 and 10	CA, RA (South = some CA)
Misc Areas										

Area	Window ¹	liner	Remaining Equipment ^{11,12}	Piping ⁴	Floor ⁶	Walls ⁶	Ceiling ⁶	Asbestos ⁷	RCRA Hazardous	Radiological
1CSC	yes (1)	sampling chamber is a full liner	manipulator arm (operable), misc spent sample items, 23T of interlocking steel shielding	as found	as found	as found	as found	none	see notes 9 and 10	HCA, HRA (internal)/ CA (external)
PSC1	no	no	none	none	fixed	fixed	fixed	none	see note 9	HCA, Air
PSC2	no	no	none	none	fixed	fixed	fixed	none	see note 9	CA
PSC3	no	no	none	none	fixed	fixed	fixed	none	see note 9	HCA, Air
Control Room	no	no	original reprocessing system control console	as found (~250 lf)	fixed by as-is paint	fixed by as-is paint	fixed by as-is paint	none friable floor tile removed	see notes 9 and 10	Some CA, RA (back of instrument racks and part of records aisle)
UXA	no	no	MCC #4 – operable. See note 5	as is (~750lf of ~1500 lf removed)	fixed by as-is paint	fixed by as-is paint	fixed by as-is paint	none	see notes 9 and 10	Some CA, Ra in SW corner Some HCA in Overheads Overhead duct, fixed rad areas, and hot spots contribute to dose rates in area, HFA S. Wall
Excluded Areas (No Demo Prep)										
CCR	yes (1)	no	shield door hoist - operable	as found, ~1,100 LF	as found	as found	as found	n/a	as found, see notes 9 and 10	HCA, HRA, Air
CPC	yes (4)	yes (pan)	racks, 275 HLW canisters, 2 evacuated canisters, various high dose waste, PAR/16T crane, operational	as found, ~250 LF	as-is liner	as-is paint	as-is paint	as found, inaccessible	as found, see notes 9 and 10	HCA, VHRA, Air
EDR	no	yes (pan)	bridge crane, shield doors, transfer cart, misc. handling equip.,	as found, ~1,000 LF	as found	as found	as found	none	as found, see notes 9 and 10	CA, HCA tracks, RA, Air

Area	Window ¹	liner	Remaining Equipment ^{11,12}	Piping ⁴	Floor ⁶	Walls ⁶	Ceiling ⁶	Asbestos ⁷	RCRA Hazardous	Radiological
			steel plate shielding (operational) See note 5							
EDR Pit	no	floor and wall	none	none	as found	as found	n/a	none	as found; see notes 9 and 10, potential metals contamination on floor	HCA, HRA, Air
EDR VA	yes (1)	no	as found for management of HLW canisters	as found, ~300 LF	as found	as found	as found	none	as found, see notes 9 and 10	RBA
CVA	no, see CPC	no	see note 5	as found, ~250 LF	as found	as found	as found	none	as found, see notes 9 and 10	RBA, RMA, FCA, CA above 7ft.
COA	no	no	as found	as found, ~1,900 LF	as found	as found	as found	none	as found, see notes 9 and 10	Some CA, RA, some HCA in overheads
NOA	no	no	as found,	as found, ~450 LF	as found	as found	as found	none	as found, see notes 9 and 10	Some CA
HEV	no	no	blowers, duct 2 HEPA banks, roughing filters, pre-filters, operable	as found, ~360 LF	as found	as found	as found	none	as found; see notes 9 and 10, Pb shielding in instrument room; filters may contain metal contamination	Filter Room: HCA, HRA, Air Crane Room: HCA, HRA Blower Room: CA, RA Instrument Area: Fixed CA, RA
VWR	no	no	washer yes (by-passed) inlet and outlet ducting operable	as found, ~1,500 LF	as found	as found	as found	none	as found; see notes 9 and 10, metals contamination may be in sediment in washer	HCA, HRA, Air Mixed fission products fixed on internal parts of ducts and washer. Rad levels >5R/hr from parts of washer; general

Area	Window ¹	liner	Remaining Equipment ^{11,12}	Piping ⁴	Floor ⁶	Walls ⁶	Ceiling ⁶	Asbestos ⁷	RCRA Hazardous	Radiological
										background: 200 to 10000 mR/h. RCRA constituents present.
VEC	no	no	blowers, HEPA filter banks operable	as found, ~2,100 LF	as found	as found	as found	as found; ~15 LF on residual piping	as found; see notes 9 and 10, filters may contain metals	CA, RA
VSR	no	no	louvered N wall, chiller, blower motor, pumps, - operable	as found, ~500 LF	as found	as found	as found	floor tile	as found, see notes 9 and 10	CA in room and air handler
ROOFs	n/a	n/a	evaporator. see note 5	n/a	n/a	n/a	n/a	HEV, MSM, PPH, EDR, CVA Hatch, OGA, CPC, SST Pump Rm, A&PC Lab, PMC Door Hoist, CR, XCR, VEC have suspect ACM roof material covering about 11,000 ft ²	see notes 9 and 10, potential Pb flashing	Some CA, RA mostly on roof areas.
LWC	no	yes (pan)	10 components: 3D-2, 4D-8, 4D-10, 4D-13, 7D-2, 7D-8, 7D-14, 13D-7, 13D-8, 3Y-1	as found	as found	as found	as found	gaskets on equipment	see notes 9 and 10, potential metals contamination on floor	HCA, HFA, HRA, Air

Notes:

1. See Window inspection report dated 10/6/10.
2. See tab "RIR based Ci Inventory 2012" for curie inventory projection.
3. For area agreed upon as complete, WVES will maintain the area as documented, or return the area to that completed status.=
4. Piping estimates are ROM values derived from PBS-02 estimates from 2000 and new estimates yes (2008) for aisles. Rooms stripped of piping (e.g., XC-1, XC-2, XC-3, OGC, LWC, etc.) may have residual piping stubs extending 6 inches or more from wall. Original through-wall "S-shaped" piping penetrations (Bechtel Drawing 15A-L-5, types A and B) with Unibestos insulation remain in walls, floors and ceilings. Original through-wall straight piping penetrations are not shown to have Unibestos insulation and remain as-is in walls, floors, and ceilings Residual through-wall piping was originally primed and painted with an epoxy resin. Insulation was originally covered with Vimasco mastic with the ends wrapped with kraft paper.
5. Equipment to support manned entry (e.g. containments, breathing air cart, radiological instruments)
6. Fixed = if found >200 dpm beta/gamma and/or >20 dpm alpha each /100cm ² then fixative applied (e.g. paint, grout, fixative) to reduce level of transferable contamination.
7. Asbestos removal activity for "none" is for accessible friable asbestos insulation material.
8. Active utility and service lines that support HLW canister management and demolition remain.
9. Original paint and primer used in the MPPB remains and may contain lead, asbestos, and potentially other hazardous metals.
10. Some commercial hazardous inventory (e.g., lights, PCB ballasts, batteries, lead, printed circuit boards) may remain in some of areas of the MPPB. A June 2011 inventory of remaining hazardous items will be available. Serviceable or listed equipment remains. Accessible Hazardous materials will be removed
11. Personnel access platforms, active ventilation, structural supports and associated hardware will remain
12. For operable equipment, WVES will provide documentation or demonstration agreeable to DOE the ability to return equipment to service.
13. Measurement technique – Demolition checklist with documentation modified for each major cell

The Offeror will be responsible for the management and/or disposition of waste currently on-site at the time of contract transition. The Offeror will be responsible for the identification, characterization, processing, packaging, transportation, and disposal of any secondary waste that may be generated based on its technical approach.

For pricing purposes, it is assumed that low-level/ mixed low-level radioactive waste may be disposed of off-site at the Nevada National Security Site (NNSS). The disposal rate at NNSS is \$14.51/ ft³, and any waste being disposed of at NNSS will be evaluated using this rate. However, per Section L.5 of the RFP, NNSS disposal costs should not be included in the Offeror's proposed estimated cost. DOE will add the costs associated with NNSS disposal as part of the total evaluated price based on the Offeror's proposed technical approach and the proposed waste disposition paths.

Additionally, Offerors may refer to the Low Level/Mixed Low Level Radioactive and Hazardous Waste Treatment ID/IQ Contracts which may be found at <http://www.emcbc.doe.gov/dept/contracting/primecontracts.php>.

It is also assumed that there is currently no disposal path for transuranic (TRU) waste, as West Valley Demonstration Project (WVDP) TRU waste has not received a defense determination and is not currently eligible for shipment to the Waste Isolation Pilot Plant (WIPP). However, and as specified in Section C of the Request for Proposal (RFP), the Offeror shall package all TRU waste in accordance with the Waste Acceptance Criteria for the WIPP and the RHTRU and CHTRU waste packaging instructions.

In the table below are the estimated waste volumes in storage on-site at WVDP.

Waste Stream	Total Estimated Volume of waste on June 30, 2011
RCRA/Universal	50 ft ³
Sanitary Waste	0
Industrial Waste	700 ft ³
Low-Level Waste ¹	124,000 ft ³
Mixed Low-Level Waste	7,000 ft ³
Transuranic (TRU) ^{2, 3}	
Contact Handled (CH) TRU ^{1,4}	20,000 ft ³
Remote Handled (RH) TRU ^{1,4}	33,000 ft ³
Mixed CH-TRU	1,000 ft ³
Mixed RH-TRU	8,000 ft ³
HLW	6,900 ft ³
HLW (Liquids/sludges)	
Tank 8D-1 ⁵	15,000 g
Tank 8D-2 ⁵	10,000 g
Tank 8D-3 ⁵	2,000 g
Tank 8D-4	10,000 g
Main Plant Process Bldg Liquid Wastes (Vessels)	

5D15A1	8,000 g
5D15A2	5,000 g
5D15B	8,000 g
7D2	5,000 g
Reuse ⁶	4,952 ft ³

Estimate generated April, 2010.

NOTES:

1. Approximately 13,455.5 ft³ of legacy waste is expected to require a 435.1 waste determination. Waste types may include Vitrification vessels, and tank farm pumps.
2. TRU waste is currently expected to be stored on site for the duration of the contract period.
3. Some waste currently identified as TRU was generated from decontamination of Head End Cells. These cells preceded chemical separation of the spent fuel.
4. TRU volumes are estimates before size reduction/repackaging.
5. The contractor is not responsible for the disposal of the liquid wastes in tanks 8D-1, 8D-2, and 8D-3
6. Category includes equipment that is presently being stored in Lag Storage for potential future use. This equipment may be identified as waste at some point prior to June 30, 2011. If categorized as waste at some future point, it is estimated that more than 95% would be LLW, with the remaining being MLLW or industrial waste.

In the table below are the WVDP containers/vessels that need a DOE O 435.1 Waste Incidental to Reprocessing (WIR) evaluation before transportation and disposal are possible.

DESCRIPTION	VOLUME FT3
CFMT	2230
MFHT	1616
Melter*	1616
WTF Xfer Pump	861
WTF Mob Pump	435
WTF Mob Pump	572
WTF Mob Pump	572
8D-3 Pump	100 (Estimate)
8D-4 Pump	100 (Estimate)
8D-4 Jumper Pump/Pods	100 (Estimate)
8D-4 Steam Jet/Riser	100 (Estimate)
4C-1	144 (Box estimate)
4D-2	637 (Box estimate)
7D-1	588 (Box estimate)
7C-1	611
7C-2	1262
7D-4	586
7D-10	894
VIT Expended Materials	
2 drums inside	162
8 gallons of water removed from process line (6-50-2-015) between 8d-1 and LWTS	7.5
WTF HLW Spill Cleanup (12/15/97)	81
WTF HLW Spill Cleanup (12/15/97)	81
TOTAL	13455.5
* WIR evaluation is in process, NRC and public review is due for completion by the end of September 2010.	